

PRODUCTION

Drilling 7-7/8" hole from 350' to ± 3100' with fresh water and high vis. sweeps as needed. Drilling 7-7/8" hole from ± 3100' to TD with a fresh water low solids non-dispersed mud system. Run 5-1/2" casing as follows:

<u>Depth</u>	<u>Length</u>	<u>Description</u>
7620' to 6500'	(1120')	17# N-80 Lt&C
6500' to surface	(6500')	17# K-55/J-55 Lt&C

Design Criteria

Tension	1.8
Collapse	1.125
Burst	1.0

Cement 5-1/2" production casing in two stages with the DV tool at ± 4700' as follows:

- 1st stage: ± 450 sxs of 50/50/2 poz containing gel, fluid loss control, dispersant, free water agent and cello flakes mixed @ 13ppg, 1.27 cu ft/sx yield. Tail with ± 100 sxs class B with fluid loss control mixed @ 15.7 ppg, 1.17 cu. ft/sx yield
- 2nd stage: ± 350 sxs class B with 3% sodium metasilicate mixed @ 11.3 ppg, 281 cu. ft/sx yield. Tail with ± 100 sxs class B mixed @ 15.7 ppg, 1.17 cu ft/sx yield. Volume plus 35% excess. Circulate cement to surface. (Exact volumes to be calculated from caliper logs)

Cementing Hardware:

Guide shoe with float collar at the top of 1st joint. Centralize shoe joint and next four joints. Centralize and turbalize above and below stage tool, oil and gas zones as needed and across the Ojo Alamo formation.